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LETTER AND U S EPA REGION I RESPONSE TO U S NAVY RESPONSE TO COMMENTS ON DRAFT FEASIBILITY STUDY SITE 17 GOULD ISLAND OPERABLE UNIT 6 (OU6) NS NEWPORT RI
8/22/2012
U S EPA REGION I

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION I**
5 Post Office Square, Suite 100
Boston, MA 02109-3912

August 22, 2012

Ms. Maritza Montegross
NAVFAC MIDLANT (Code OPNEEV)
Environmental Restoration
Building Z-144, Room 109
9742 Maryland Avenue
Norfolk, VA 23511-3095

Re: Responses to EPA's Comments on the Draft Feasibility Study for Gould Island, OU6

Dear Ms. Montegross:

EPA reviewed the Navy's responses, dated July 20, 2012 to EPA's comments of November 10 and 30, 2011 for the Draft Feasibility Study for Gould Island. The Draft Feasibility Study (FS) presents the development and evaluation of remedial alternatives to address soil and sediment contamination at Site 17. For ease of reference, EPA retained the Navy's comment numbering. Detailed comments are provided in Attachment A.

GC2. Contrary to the response, all data collected are relevant and need to be presented because there is no evidence that the new data prove that the older data are not valid. As stated, the new data were collected from locations surrounding the older sampling locations, but even if the Navy attempted to resample at older locations, for several reasons the new data would not prove that the previously-detected contamination no longer existed. Also, please note that the more recent sample locations referenced by Navy in its response are not presented in Figure 6-3C that presents sitewide ERM-Q PRG exceedances. Please ensure all data are presented and considered when making decisions related to remediation of this site.

GC3. Please clarify which contaminated media is in the sumps. If it is soil, the soil PRGs that are being developed should be used as the cleanup standards. If the material is considered sediment, freshwater sediment PRGs may need to be developed. Which PRGs apply will determine how extensive the area targeted for excavation will be (since contaminants may have migrated into and out of the sump area). While the Navy may have discussed this issue in the response to GC42, the text throughout the document should clarify that additional remedial measures may be required other than just removing the material in the sumps (*e.g.*, additional excavation or capping the area of remaining contamination).

I look forward to working with you and the Rhode Island Department of Environmental Management toward the cleanup of the Gould Island. Please do not hesitate to contact me at (617) 918-1385 should you have any questions.

Sincerely,

Kymberlee Keckler, Remedial Project Manager
Federal Facilities Superfund Section

Attachment

cc: Pam Crump, RIDEM, Providence, RI
Deb Moore, NETC, Newport, RI
David Peterson, USEPA, Boston, MA
Bart Hoskins, USEPA, Boston, MA
Ken Finkelstein, NOAA, Boston, MA
Steven Parker, Tetra Tech-NUS, Wilmington, MA

**ATTACHMENT A**

| No. | Comment |
|---|---|
| 4. | Although the text can include general information on the history of the island's use, the document should specify the historical use of the area that is within the operable unit subject to this FS (specify whether it is all of Site 17 or just the area around Building 32 and the contamination associated with it). Consistent terminology should be used throughout the FS. |
| 8. | See response to GC3 as far as what contaminated media are present and whether a separate RAO is needed for the sump material. Also, please clarify whether the future industrial use also includes exposure to trespassers. |
| 9. | The protectiveness level for ingestion should be based on a level that is protective of human health unless the level to protect ecological receptors is lower. Please clarify whether a level that is "protective of fish tissue" refers to addressing a human health risk from people consuming the fish or an ecological risk to the fish and biota.<br><br>Regarding, the citation of TSCA as the cleanup standard for PCBs, the risk-based standard used in the FS should be cited under 40 C.F.R. §761.61(c). |
| 10. | Contaminants may have migrated from the sumps. The FS mentions that water levels in the sumps change with changes in groundwater levels. See EPA's comment to GC3.<br><br>Also, how much contaminated groundwater lies under the foundation? Can it migrate to the bay? |
| 11. | If there are exceedances of PRGs in the sediment in the Northeast shoreline, the cost of alternatives to address the exceedances and volume of sediments exceeding PRGs (even if MNR is chosen to protect the eel grass beds) should be included in the cost estimates. |
| 12. | See comments to GC3, SC8, SC10 regarding what media are in the sumps (soil or sediment), what PRGs are required, and whether the contamination has migrated beyond the sumps and if additional contaminated media needs to be removed beyond the "concrete boxes." |
| 13. | In its response to GC2, the Navy stated that there is one exceedance in an eelgrass area. That does not preclude the Navy from including the area in the remedial action. "Augmenting natural recovery" in SD 3 and "monitoring sediments in the Northeast shoreline" in SD4 require meeting MNR standards. The Navy needs to show that over time sediment PRGs will be achieved under either alternative. |
| 17. | Please respond to the second part of EPA's comment regarding whether the removal action addressed the PCBs in the groundwater. |
| 22. | See the previous question about PCB contamination remaining in groundwater after the transformer removal action. Also, after the sediment is remediated and the PCB contaminated sediment is removed or capped, can it be recontaminated from PCBs (either in soil or groundwater) from the island? The text referenced by EPA still needs to be corrected because the relevant thresholds are the sediment PRGs not the COC concentrations existing in the |

sediment. Regardless, it is appropriate to stabilize the shoreline in this area to prevent further erosion of soil to the sediment because the available boring analytical data are limited to soil intervals at the surface, the groundwater interface, and a stained interval if present.

23a. See SC4 about whether the "site" refers to all of Site 17 or just the area associated with Building 32. If the former is the case was the groundwater evaluated through Site 17 or just around Building 32.

24. Please incorporate the information in the response into the FS.

29. See EPA second comment on SC9.

30a+b. Since groundwater will be added as a media of concern, the chemical-specific ARARs for groundwater will include federal MCLs, federal MCLGs, federal risk-based standards, and any more stringent State groundwater standards (including remediation regulation leachability standards).

30c. See EPA second comment on SC9.

34. In the FS, please describe how PRGs for PCBs in sediment were selected to address human health risks from ingestion of shellfish contaminated with PCBs.

35. Please see EPA's comment on SC22.

36. This comment pertains to Section 2.4 that presents an estimation of areas and volumes subject to remedial action. EPA requested that the area of eelgrass that had exceedances of the sediment PRGs be calculated. That value should be provided because this area is included in the remedial action. It is not relevant whether active remediation will be required for the eelgrass beds, monitoring is proposed.

Regarding the comment that requested the volume of soil exceeding risk standards, please instead provide the area and volume of soil subject to any remedial action.

37. Please see EPA's comment on GC3.

38. Please see EPA's comment on SC36.

41. Regarding erosion issues, see EPA's comment on SC22.

42. As discussed on the August 8, 2012 conference call, confirmation sampling and/or soil cover and institutional controls will be required in some areas that do not achieve PRGs. Regarding what PRGs should apply, see EPA's comment on GC3.

45. Part of this comment refers to whether remedial activities (handling of contaminated materials) will occur on the mainland shore of the base. For instance, if barges are off-loaded onto trucks within the mainland area of the base, the off-loading operations need to be included as part of the remedial action and evaluated in the FS. There is also an issue regarding the Off-Site Rule. If the transshipment from barge to truck is within the base (on the mainland) and within the Superfund Site, then the Off-Site Rule does not apply to the transshipment facility. However, if the transfer from barge to truck will occur off of the base, then the Off-Site Rule applies to

whatever shoreline facility the transshipment occurs at.

47. Monitoring of sediment in some areas will be required, so please ensure that it is retained in the Draft Final FS.

48. If, as stated in response to SC42, contamination could be left in place after the contaminated media in the sumps is removed, then coastal flooding could result in migration of contamination unless the remaining contaminated media is capped to prevent infiltration from flooding.

50. Clarify what "legal difficulties" exist to prevent enforceable shellfish restrictions from being established. State shellfishing bans have been implemented at many Superfund Sites.

51. It is unclear whether a one foot cover would be sufficient unless the purpose of the cover is to dilute the concentration of sediment contamination (a "thin-layer cap" or enhanced MNR) versus a protective barrier to prevent contact with contaminated sediments.

57. The more recent sampling results do not indicate that the previously-detected contamination is not there but rather that the contamination is not uniformly distributed across a large area. (*See also* EPA's comment on GC2.) Some exceedances were significant, so with the available data it is unclear whether monitoring alone is the most appropriate remedy.

60a. See EPA's comments on GC2 and SC57.

60b. See EPA's comment on SC45.

62. See EPA's comments on GC3 and SC48.

63a. See EPA's comment on SC13.

65. See EPA's comment on SC45.

66. See EPA's comment on SC4 regarding how the Navy defines the site for purposes of delineating a LUC boundary.

67. See EPA's comment on SC4 regarding how the Navy defines the site for purposes of delineating an LUC boundary.

70. It is still unclear that a LUC only alternative is either protective or meets ARARs. Please explain why it is carried forward.

71. Leaving sump contamination subject to coastal flooding does not meet ARARs or protectiveness standards.

77. As previously noted, OS-2 is not protective and does not meet ARARs, so it is not a viable alternative.

78. As previously noted, OS-2 is not protective and does not meet ARARs, so it is not a viable alternative.

80. See EPA's comment on SC63.

81. See EPA's comment on SC57.

82. See EPA's comment on SC13.

85. The cohesion testing was conducted on the existing sediment bed that is covered heavily with shells and shell fragments. The scope of the testing was not comprehensive enough to determine that the proposed cover material would be stable enough to serve as a long-term cover. Ultimately, any cover material selected would need to be evaluated for stability, including resistance to reflection effects, as a component of a cover remedy.

86a. The standards for the sediment dewatering facility on-shore on the island need to be evaluated under the NCP criteria, particularly if the facility is in the coastal floodzone.

86b. See previous comments on LUCs.

90. See EPA's comment on SC50.

91a+b. See EPA's comments on GC2 and SC13.

92. In EPA's proposed text, change "by fisherman" to "by human activities." LUC are ineffective against natural forces that might disturb the sediments. See EPA's comment on SC50.

94. See EPA's comments on GC2 and SC13.

95. See EPA's comment on SC50.

96a. See previous EPA comments about the matters listed in EPA's original comments and the responses.

96b+c. See EPA's comments on GC2 and SC13.

98. See EPA's comments on GC2 and SC13.

99. See EPA's comment on SC86a.

100. See previous EPA comments about the matters listed in EPA's original comments and the responses.

102. See EPA's comments on GC2 and SC13.

106. Regarding the sumps, see EPA's comments on GC3.

107. Regarding the second paragraph of the response, if the water in the sumps is trapped surface water (because the sumps are water tight), it isn't groundwater.

108. What is the PCB PRG that is protective of ingestion risk from consuming PCB contaminated shellfish?

136c. Please explain how it was determined that armor is not needed or than sand or similar material would be sufficiently stable.

**Attachment C**

Table 2-1, p. 1 Restore "Subpart B" to the citation for the MCLs since groundwater will need to meet all federal drinking water and risk-based standards for all contaminants (*i.e.*, not just identified COCs).

Table 2-1. p. 3 Since CWA NRWQCs were not used to develop sediment cleanup number, move the ARAR to Table 2-3 since they will be used as Action-specific ARARs establishing monitoring standards.

Table 2-1, p. 4 Keep the Health Advisory citation since groundwater will need to meet all federal drinking water and risk-based standards for all contaminants (*i.e.*, not just identified COCs).

Table 2-1, p.5 Regarding the paragraph for Table 2-1, what standards/guidance did the Navy use to assess ingestion risks from consuming contaminated shellfish at the site?

Table 2-2, p. 5 Retain the citation to the Wetland Executive Order since federal jurisdictional wetlands includes intertidal areas and subtidal areas (including special aquatic habitats such as eel grass beds).

*(Addition to Table 2-2 not previously included): Add the Federal Endangered Species Act to the tables since the Atlantic Sturgeon was recently listed as an Endangered Species in the waters of southern New England, including Narragansett Bay.

| | | | | |
|---|---|---|---|---|
| Endangered Species Act | 16 U.S.C. 1531 *et seq.*, 50 C.F.R. Parts 200 and 402 | Applicable | Remedial actions may not jeopardize the continued existence of federally-listed endangered or threatened species, or adversely modify or destroy their critical habitat. The Atlantic Sturgeon has been listed as an Endangered Species in the region including Narragansett Bay. | The Navy will consult with the appropriate federal resource agencies to ensure that the dredging, dewatering, and cap maintenance components will be conducted to minimize disturbance to aquatic habitats in Narragansett Bay that may be used by the federally endangered Atlantic Sturgeon. |

**Regarding RI Endangered Species** - the State's listed endangered sea turtles are for off-shore waters only, so would not apply to the bay within the Site, and the Atlantic and short-nosed sturgeons are listed as state historic species (http://www.rinhs.org/wp-content/uploads/ri_rare_animals_2006.pdf). It is unclear if this refers to breeding populations versus migratory fish that may use the bay for foraging (the primary breeding area for sturgeon found in the southern New England area is in the Hudson River).

**Additions to Table 2-3 not previously included** – Regarding the TSCA citation on page 1, the proper citation should be to 40 C.F.R. §761.61(c) and the text should be:

| | | | | |
|---|---|---|---|---|
| Toxic Substance Control Act (TSCA), Polychlorinated Biphenyls (PCB) Remediation Waste Risk-Based Standards | 15 U.S.C. §2601 *et seq.*; 40 C.F.R. §761.61(c) | Applicable | Risk-based standards for the sampling, cleanup, or disposal of PCB remediation waste. Written approval for the proposed risk-based clean-up will be obtained from the Office of Site Remediation and Restoration, EPA Region 1. | Standards apply to all alternatives that address PCBs, whether through sampling, cleanup, disposal, or capping/cover. The Navy will solicit public comment in the Proposed Plan about the finding that the proposed remedy for PCB contamination at the Site will not pose an unreasonable risk of injury to health or the environment. An EPA finding that the remedy meets these standards will be included in the Record of Decision. |

The Navy may also add State air standards that are applicable to the potential generation of hydrogen sulfide from sediment dredging and dewatering activities. Air standards should be added to the Table 2 and Table 5 (sediment alternatives) action-specific ARARs Tables.

Table 2-3, p. 8 Regarding the Sediment Guidance text, per EPA's comments on GC2 and SC13, discussion of MNR needs to be retained for any alternative that proposes monitoring only in the Northeast area.

Table 2-3, p. 10 For the CWA NRWQC, retain the text that describes how the standards will be used for long-term monitoring of any capping alternative and for any MNR used in the Northeast area (*see* EPA comments on GC2 and SC13).

Table 2-3, p. 11 For the state Water Quality standards, retain the text that states that these standards will apply to long-term monitoring of any capping alternative or any alternative that includes MNR. They also apply if water from dewatering sediments is discharged back to surface waters.

Table 2-3, p. 12 Retain the State Shellfish Ground standards and modify based on the presence of CERCLA contaminants.

Table 2-3, p. 12 Retain the State Commercial Fishing Restrictions, particularly if the Navy is only proposing a 1 foot thick cap (which may not be sufficient), such a thin cap could be disturbed by dragging and other bottom fishing activities.

Table 2-3, p. 12 Regarding the last paragraph, the OFFTA ROD included more State Solid Waste requirements that just cover maintenance. Please review the entire list of State Solid Waste

standards included in the OFFTA ROD to determine which should be cited for the soil alternatives at Gould Island.

**Attachment D**

As a general comment, EPA comments on the Table 2 tables also apply to relevant alternative-specific ARARs tables for each contaminated media.

p. 1, Table 2-1 It is not clear why RI Remediation Regulation changes were made. In particular, why was Section 8.01 was eliminated? Section 8.03 should be included only if they are more stringent than federal MCLs, MCLGs or risk-based standards.

p. 2. Table 2-2 Regarding the ESA, the Act is "Applicable" (*see* comment to Attachment C adding ESA standards for protecting the newly listed Atlantic Sturgeon).

p. 2, Table 2-3 Regarding the RI Hazardous Waste Regulations for Generators the citations should be to sections "5.02, 5.03, and 5.04."

p. 3, Table 4-1 Why were RI Remediation Regulation changes made? In particular, why was Section 8.01 eliminated? Section 8.03, for groundwater, should be included only if they are more stringent than federal MCLs, MCLGs or risk-based standards.

p. 4 Table 4. As a general comment, these tables need to be revised to address soil alternatives only (*see* previous comments about whether the contaminated material in the sumps will be addressed as contaminated soil or sediment). Separate tables need to be developed for groundwater alternatives. In that regard, the citations to the RI Remediation Regulation should only cite the State soil standards. When ARARs tables for the groundwater alternatives are developed, the RI Remediation Regulations for groundwater should only be included if they are more stringent than federal ARARs or risk-based standards.

p. 6 The TSCA citation to Table 5-1 should be retained. For the other sediment alternatives, the citation to 40 C.F.R §761.61(c) should be moved from the Chemical-specific ARARs Tables to the Action-specific ARARs tables replacing the TSCA citation of 40 C.F.R §761.61(a)(5)(i)(B).

p. 11 Proposed groundwater ARARs. As previously noted for the chemical-specific ARARs, include the EPA Health Advisory as a TBC. Only include the RI Remediation regulations for groundwater if they are more stringent than federal standards.

For alternative G-2, include all location-specific standards that may be prompted by the installation, sampling, maintenance and decommissioning of monitoring wells in protected resource areas (coastal floodplain, historic areas).

**Attachment F**

p. 1 RI Air Standards for dust and detrimental emissions are "Applicable."

See previous comment to Attachment C that the Navy may also add State air standards that are applicable to the potential generation of hydrogen sulfide from sediment dredging and dewatering activities. Air standards should be added to the Tables 2 and 5 (sediment

alternatives) action-specific ARARs Tables.

p. 2 For the RI Rules and Regulations for Groundwater Quality, Appendix 1 the standards are "Applicable."

p. 6-7 Please review the RI Solid Waste regulations cited for the OFFTA ROD and determine which apply to any proposed remedy that leaves contaminated material in place under the foundation/sumps.

p. 10 Regarding RI Endangered Species, the State's listed endangered sea turtles are only for off-shore waters, so they would not apply to the bay within the Site, and the Atlantic and short-nosed sturgeons are listed as state historic species (http://www.rinhs.org/wp-content/uploads/ri_rare_animals_2006.pdf). It is unclear if this refers to breeding populations versus migratory fish that may use the bay for foraging (the primary breeding area for sturgeon found in the southern New England area is in the Hudson River).